

**B&R CUSTOM CHROME  
TOLEDO, LUCAS COUNTY, OHIO  
DATA VALIDATION REPORT**

**Date:** July 10, 2012

**Laboratory:** EA Group, Mentor, Ohio

**Laboratory Project #:** 1206-00216

**Data Validation Performed By:** Lisa Graczyk, Weston Solutions, Inc. (WESTON) Superfund Technical Assessment and Response Team (START)

**Weston Analytical Work Order #/TDD #:** 20405.016.001.1875.00/S05-0001-1206-005

This data validation report has been prepared by WESTON START under the START III Region V contract. This report documents the data validation for 5 liquid waste samples collected for the B&R Custom Chrome Site that were analyzed for the following parameters and U.S. Environmental Protection Agency (U.S. EPA) methods:

- Toxicity Characteristic Leaching Procedure (TCLP) Volatile Organic Compounds (VOC) by SW-846 Methods 1311 and 8260A
- TCLP Semivolatile Organic Carbons (SVOC) by SW-846 Methods 1311 and 8270C
- Polychlorinated Biphenyls (PCB) by SW-846 Method 8082
- TCLP Metals by SW-846 Methods 1311, 6010B, and 7470A
- Ignitability by ASTM D93
- Corrosivity by SW-846 Method 9041A

A level II data package was requested from EA Group. The data validation was conducted in general accordance with the U.S. EPA "Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review" dated June 2008 and "Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review" dated January 2010. The Attachment contains the results summary sheets with the hand-written qualifiers applied during data validation.

## **TCLP VOCs by SW-846 METHODS 1311 AND 8260A**

### **1. Samples**

The following table summarizes the samples for which this data validation is being conducted.

<b>Samples</b>	<b>Lab ID</b>	<b>Matrix</b>	<b>Date Collected</b>	<b>Date Analyzed</b>
BR-VAT1	120600216-002	Liquid	6/13/2012	6/20/2012
BR-AST1	120600216-003	Liquid	6/13/2012	6/20/2012
BR-UST1	120600216-004	Liquid	6/13/2012	6/21/2012

### **2. Holding Times**

The samples were analyzed within the required holding time limit of 14 days from sample collection.

### **3. Blanks**

Method blanks were analyzed with the TCLP VOC analyses. The method blanks were free of target compound contamination above the reporting limit.

### **4. Surrogate Results**

The surrogate recovery results were within the laboratory-established quality control (QC) limits.

### **5. Laboratory Control Sample (LCS) Results**

The LCS and LCS duplicate (LCSD) recoveries and relative percent differences (RPD) were within laboratory QC limits.

### **6. Overall Assessment**

The TCLP VOC data are acceptable for use based on the information received.

## **TCLP SVOCs BY SW-846 METHODS 1311 AND 8270C**

### **1. Samples**

The following table summarizes the samples for which this data validation is being conducted.

<b>Samples</b>	<b>Lab ID</b>	<b>Matrix</b>	<b>Date Collected</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>
BR-VAT1	120600216-002	Liquid	6/13/2012	6/20/2012	6/20/2012
BR-AST1	120600216-003	Liquid	6/13/2012	6/20/2012	6/20/2012

### **2. Holding Times**

The samples were analyzed within the required holding time limit of 14 days from sample collection to extraction and 40 days from extraction to analysis for soil samples.

### **3. Blanks**

A method blank was analyzed with the TCLP SVOC analysis. The method blank was free of target compound contamination above the reporting limit.

### **4. Surrogate Results**

The surrogate recoveries were within the laboratory-established QC limits except for as follows.

In one sample, one of the six surrogates was outside QC limits due to potential matrix interference and was not quantitated. No qualifications are required in this instance.

### **5. LCS Results**

The percent recoveries and RPDs for the LCS and LCSD results were within the laboratory-established QC limits for target compounds.

### **6. Overall Assessment**

The TCLP SVOC data are acceptable for use based on the information received.

## **PCBs BY U.S. EPA SW-846 METHOD 8082**

### **1. Samples**

The following table summarizes the samples for which this data validation was conducted.

<b>Samples</b>	<b>Lab ID</b>	<b>Matrix</b>	<b>Date Collected</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>
BR-UST1	120600216-004	Liquid	6/13/2012	6/19/2012	6/20/2012
BR-TRANS1	120600216-005	Liquid	6/13/2012	6/19/2012	6/20/2012

### **2. Holding Times**

The samples were analyzed within the required holding time limit of 14 days from sample collection to extraction and 40 days from extraction to analysis.

### **3. Blanks**

A method blank was analyzed with the PCB analyses. The method blank was free of target compound contamination above the reporting limit.

### **4. Surrogates**

The surrogate recoveries were within QC limits.

### **5. LCS Results**

The LCS and LCSD recoveries and RPDs were within the laboratory-established QC limits.

### **6. Overall Assessment**

The PCB data are acceptable for use based on the information received.

## **TCLP METALS BY SW-846 METHODS 1311, 6010B, AND 7470A**

### **1. Samples**

The following table summarizes the samples for which this data validation is being conducted.

<b>Samples</b>	<b>Lab ID</b>	<b>Matrix</b>	<b>Date Collected</b>	<b>Date Analyzed</b>
BR-VAT1	120600216-002	Liquid	6/13/2012	6/21/2012 – 6/22/2012
BR-AST1	120600216-003	Liquid	6/13/2012	6/21/2012
BR-UST1	120600216-004	Liquid	6/13/2012	6/21/2012

### **2. Holding Times**

The samples were analyzed within the required holding time limit of 28 days from sample collection to analysis for mercury and 180 days from sample collection to analysis for all other metals.

### **3. Blank Results**

Method blanks were analyzed with the TCLP metals analysis. The blanks were free of target analyte contamination above the reporting limits.

### **4. LCS Results**

The LCS recoveries were within the laboratory-established QC limits for target analytes.

### **5. MS and MSD Results**

EA Group analyzed an MS and MSD using a sample from another site; therefore, matrix interferences could not be evaluated using the MD/MSD. For the MS/MSD that was analyzed, the percent recoveries and RPDs were within QC limits.

### **6. Overall Assessment**

The TCLP metals data are acceptable for use based on the information received.

**GENERAL CHEMISTRY PARAMETERS (Ignitability by ASTM D93 and Corrosivity by SW-846 Method 9041A)**

**1. Samples**

The following table summarizes the samples for which this data validation is being conducted.

<b>Samples</b>	<b>Lab ID</b>	<b>Matrix</b>	<b>Date Collected</b>	<b>Date Analyzed</b>
BR-D-H2SO4	120600216-001	Liquid	6/13/2012	6/15/2012
BR-VAT1	120600216-002	Liquid	6/13/2012	6/15/2012 – 6/25/2012
BR-AST1	120600216-003	Liquid	6/13/2012	6/15/2012 – 6/25/2012
BR-UST1	120600216-004	Liquid	6/13/2012	6/25/2012

**2. Holding Times**

There is no specific holding time limit for pH and ignitability. The methods state that the samples should be analyzed as soon as possible. Because these samples were wastes, the holding times were acceptable.

**3. Laboratory Duplicate Results**

A laboratory duplicate was analyzed with the pH analyses. The duplicate RPD was within QC limits.

**4. Overall Assessment**

The ignitability and pH data are acceptable for use based on the information received.

Data Validation Report  
B&R Custom Chrome Site  
EA Group  
Laboratory Project #: 1206-00216

**ATTACHMENT**

**EA GROUP  
RESULTS SUMMARY WITH QUALIFIERS**



## **Project Narrative 1206-00216**

### Data Flag Table

B	The method blank contained a standard laboratory contaminant (Methylene Chloride, Acetone, Hexane, Phthalates, etc.) above the standard laboratory method detection limit. If the analyte is present in the sample at a concentration up to ten times the blank level, the result is reported with a "B" indicating method blank contamination. Samples will be reported without a "B" if the analyte concentration in the sample is greater than ten times the blank level.
E	An analytical result marked with an "E" indicates the result reported is above the high end limit of the calibration curve and should be considered an estimated concentration.
DIL	Due to matrix interference or high analyte concentration, a dilution was required. The spikes and/or surrogates results could not be quantitated and therefore marked "DIL".
J	An analytical result marked with a "J" indicates the result reported was below the standard reporting limit and above the method detection limit. As the observed level approaches the MDL there is an increasing probability of a false positive response.
MI	Analytical results marked as "MI" indicate that due to inherent matrix interference, the result could not be quantitated.
#	Results flagged "#" indicate the reported result may be outside allowable permit levels as provided by the client, when applicable.
NA	A result or field marked as "NA" indicates that it was not applicable for this project.
Q	A quality control result flagged with a "Q" indicates the percent recovery was outside the acceptable range as determined by the laboratory.

\*\* Positive results for this analyte represent a probable combination of 3-Methylphenol (m-Cresol) and 4-Methylphenol (p-Cresol).





**EAG Workorder:** 1206-00216

**Client Project:** BR Custom Chrome

**Client ID:** BR-D-H2S04

**Date/Time Sampled:** 6/13/2012 / 1540

**Received:** 6/14/2012

**EAG ID:** 1206-00216-1

<u>Parameter</u>	<u>CAS #</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Prep Date</u>	<u>Analysis Date</u>	<u>Time</u>	<u>Analyst</u>
pH:SW846-9041A		0		pH units	6/15/2012	6/15/2012		MEF

**Client ID:** BR-VAT 1

**Date/Time Sampled:** 6/13/2012 / 1525

**Received:** 6/14/2012

**EAG ID:** 1206-00216-2

<u>Parameter</u>	<u>CAS #</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Prep Date</u>	<u>Analysis Date</u>	<u>Time</u>	<u>Analyst</u>
Arsenic, TCLP: SW846-6010B	7440-38-2	<1.0	1.0	mg/liter	6/19/2012	6/22/2012		CMB
<b>Barium, TCLP: SW846-6010B</b>	7440-39-3	<b>3.04</b>	1.0	mg/liter	6/19/2012	6/22/2012		CMB
<b>Cadmium, TCLP: SW846-6010B</b>	7440-43-9	<b>10.5</b>	10	mg/liter	6/19/2012	6/22/2012		CMB
<b>Chromium, TCLP: SW846-6010B</b>	7440-47-3	<b>535</b>	100	mg/liter	6/19/2012	6/22/2012		CMB
<b>Lead, TCLP: SW846-6010B</b>	7439-92-1	<b>71.9</b>	10	mg/liter	6/19/2012	6/22/2012		CMB
Mercury, TCLP: SW846-7470A	7439-97-6	<0.0050	0.0050	mg/liter	6/21/2012	6/21/2012		CMB
Selenium, TCLP: SW846-6010B	7782-49-2	<1.0	1.0	mg/liter	6/19/2012	6/22/2012		CMB
Silver, TCLP: SW846-6010B	7440-22-4	<10	10	mg/liter	6/19/2012	6/22/2012		CMB
SW846 1311: TCLP Extraction		Complete				6/18/2012		CMB
<b>Flashpoint: ASTM D93</b>		<b>&gt;200</b>		degrees F		6/25/2012		REF
pH:SW846-9041A		0		pH units	6/15/2012	6/15/2012		MEF

**Client ID:** BR-AST 1

**Date/Time Sampled:** 6/13/2012 / 1510

**Received:** 6/14/2012

**EAG ID:** 1206-00216-3

<u>Parameter</u>	<u>CAS #</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Prep Date</u>	<u>Analysis Date</u>	<u>Time</u>	<u>Analyst</u>
Arsenic, TCLP: SW846-6010B	7440-38-2	<0.50	0.50	mg/liter	6/19/2012	6/21/2012		CMB
Barium, TCLP: SW846-6010B	7440-39-3	<0.50	0.50	mg/liter	6/19/2012	6/21/2012		CMB
Cadmium, TCLP: SW846-6010B	7440-43-9	<0.50	0.50	mg/liter	6/19/2012	6/21/2012		CMB
Chromium, TCLP: SW846-6010B	7440-47-3	<0.50	0.50	mg/liter	6/19/2012	6/21/2012		CMB
Lead, TCLP: SW846-6010B	7439-92-1	<0.50	0.50	mg/liter	6/19/2012	6/21/2012		CMB
Mercury, TCLP: SW846-7470A	7439-97-6	<0.0050	0.0050	mg/liter	6/21/2012	6/21/2012		CMB
Selenium, TCLP: SW846-6010B	7782-49-2	<0.50	0.50	mg/liter	6/19/2012	6/21/2012		CMB
Silver, TCLP: SW846-6010B	7440-22-4	<0.50	0.50	mg/liter	6/19/2012	6/21/2012		CMB
SW846 1311: TCLP Extraction		Complete				6/18/2012		CMB
<b>Flashpoint: ASTM D93</b>		<b>&gt;200</b>		degrees F		6/25/2012		REF
pH:SW846-9041A		7		pH units	6/15/2012	6/15/2012		MEF



**EAG Workorder:** 1206-00216

**Client Project:** BR Custom Chrome

**Client ID:** BR-UST 1

**Date/Time Sampled:** 6/13/2012 / 1610

**Received:** 6/14/2012

**EAG ID:** 1206-00216-4

<u>Parameter</u>	<u>CAS #</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Prep Date</u>	<u>Analysis Date</u>	<u>Time</u>	<u>Analyst</u>
Arsenic, TCLP: SW846-6010B	7440-38-2	<0.50	0.50	mg/liter	6/19/2012	6/21/2012		CMB
Barium, TCLP: SW846-6010B	7440-39-3	<0.50	0.50	mg/liter	6/19/2012	6/21/2012		CMB
Cadmium, TCLP: SW846-6010B	7440-43-9	<0.50	0.50	mg/liter	6/19/2012	6/21/2012		CMB
Chromium, TCLP: SW846-6010B	7440-47-3	<0.50	0.50	mg/liter	6/19/2012	6/21/2012		CMB
Lead, TCLP: SW846-6010B	7439-92-1	<0.50	0.50	mg/liter	6/19/2012	6/21/2012		CMB
Mercury, TCLP: SW846-7470A	7439-97-6	<0.0050	0.0050	mg/liter	6/21/2012	6/21/2012		CMB
Selenium, TCLP: SW846-6010B	7782-49-2	<0.50	0.50	mg/liter	6/19/2012	6/21/2012		CMB
Silver, TCLP: SW846-6010B	7440-22-4	<0.50	0.50	mg/liter	6/19/2012	6/21/2012		CMB
SW846 1311: TCLP Extraction		Complete				6/18/2012		CMB
<b>Flashpoint: ASTM D93</b>		<b>&gt;200</b>		degrees F		6/25/2012		REF



**EAG Workorder** 1206-00216  
**EAG ID:** 1206-00216-002  
**Client ID:** BR-VAT 1  
**Client Project:** BR Custom Chrome

**Matrix:** Liquid  
**Analyst:** DFM

**Date Sampled:** 06/13/2012  
**Time Sampled:** 1525  
**Date Received:** 06/14/2012

<u>Parameter</u>	<u>CAS #</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>
Semi-volatile Organic TCLP: SW846-8270C					
o-Cresol	95-48-7	<0.050	0.050	mg/liter	6/20/2012
m & p-Cresol	1319-77-3	<0.050	0.050	mg/liter	6/20/2012
1,4-Dichlorobenzene	106-46-7	<0.050	0.050	mg/liter	6/20/2012
2,4-Dinitrotoluene	121-14-2	<0.050	0.050	mg/liter	6/20/2012
Hexachlorobenzene	118-74-1	<0.050	0.050	mg/liter	6/20/2012
Hexachlorobutadiene	87-68-3	<0.050	0.050	mg/liter	6/20/2012
Hexachloroethane	67-72-1	<0.050	0.050	mg/liter	6/20/2012
Nitrobenzene	98-95-3	<0.050	0.050	mg/liter	6/20/2012
Pentachlorophenol	87-86-5	<0.25	0.25	mg/liter	6/20/2012
Pyridine	110-86-1	<0.050	0.050	mg/liter	6/20/2012
2,4,5-Trichlorophenol	95-95-4	<0.050	0.050	mg/liter	6/20/2012
2,4,6-Trichlorophenol	88-06-2	<0.050	0.050	mg/liter	6/20/2012
Extraction: SW846-3510C		Complete			6/20/2012
TCLP Extraction: SW846-1311		Complete			6/18/2012

<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Recovery Limits</u>
Nitrobenzene-d5	65.1	(35 - 114)
2-Fluorobiphenyl	64.3	(43 - 116)
p-Terphenyl-d14	74.3	(33 - 141)
2-Fluorophenol	31.1	(21 - 100)
Phenol-d6	29.5	(10 - 94)
2,4,6-Tribromophenol	106	(10 - 123)



**EAG Workorder** 1206-00216  
**EAG ID:** 1206-00216-002  
**Client ID:** BR-VAT 1  
**Client Project:** BR Custom Chrome

**Matrix:** Liquid  
**Analyst:** REC

**Date Sampled:** 06/13/2012  
**Time Sampled:** 1525  
**Date Received:** 06/14/2012

<u>Parameter</u>	<u>CAS #</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>
Volatile Organic TCLP: SW846-8260A					
Benzene	71-43-2	<0.10	0.10	mg/liter	6/20/2012
Carbon tetrachloride	56-23-5	<0.10	0.10	mg/liter	6/20/2012
Chlorobenzene	108-90-7	<0.10	0.10	mg/liter	6/20/2012
Chloroform	67-66-3	<0.10	0.10	mg/liter	6/20/2012
1,2-Dichloroethane	107-06-2	<0.10	0.10	mg/liter	6/20/2012
1,1-Dichloroethene	75-35-4	<0.10	0.10	mg/liter	6/20/2012
Methyl ethyl ketone	78-93-3	<1.0	1.0	mg/liter	6/20/2012
Tetrachloroethene	127-18-4	<0.10	0.10	mg/liter	6/20/2012
Trichloroethylene	79-01-6	<0.10	0.10	mg/liter	6/20/2012
Vinyl chloride	75-01-4	<0.10	0.10	mg/liter	6/20/2012
ZHE TCLP Extraction:SW846-1311		Complete			6/19/2012

<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Recovery Limits</u>
1,2-Dichloroethane-d4	135	(62 - 137)
Toluene-d8	106	(81 - 126)
4-Bromofluorobenzene	126	(80 - 128)



**EAG Workorder** 1206-00216  
**EAG ID:** 1206-00216-003  
**Client ID:** BR-AST 1  
**Client Project:** BR Custom Chrome

**Matrix:** Liquid  
**Analyst:** DFM

**Date Sampled:** 06/13/2012  
**Time Sampled:** 1510  
**Date Received:** 06/14/2012

<u>Parameter</u>	<u>CAS #</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>
Semi-volatile Organic TCLP: SW846-8270C					
o-Cresol	95-48-7	<0.050	0.050	mg/liter	6/20/2012
m & p-Cresol	1319-77-3	<0.050	0.050	mg/liter	6/20/2012
1,4-Dichlorobenzene	106-46-7	<0.050	0.050	mg/liter	6/20/2012
2,4-Dinitrotoluene	121-14-2	<0.050	0.050	mg/liter	6/20/2012
Hexachlorobenzene	118-74-1	<0.050	0.050	mg/liter	6/20/2012
Hexachlorobutadiene	87-68-3	<0.050	0.050	mg/liter	6/20/2012
Hexachloroethane	67-72-1	<0.050	0.050	mg/liter	6/20/2012
Nitrobenzene	98-95-3	<0.050	0.050	mg/liter	6/20/2012
Pentachlorophenol	87-86-5	<0.25	0.25	mg/liter	6/20/2012
Pyridine	110-86-1	<0.050	0.050	mg/liter	6/20/2012
2,4,5-Trichlorophenol	95-95-4	<0.050	0.050	mg/liter	6/20/2012
2,4,6-Trichlorophenol	88-06-2	<0.050	0.050	mg/liter	6/20/2012
Extraction: SW846-3510C		Complete			6/20/2012
TCLP Extraction: SW846-1311		Complete			6/18/2012

<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Recovery Limits</u>
Nitrobenzene-d5	48.5	(35 - 114)
2-Fluorobiphenyl	42.8	(43 - 116)
p-Terphenyl-d14	40.9	(33 - 141)
2-Fluorophenol	MI	(21 - 100)
Phenol-d6	11.8	(10 - 94)
2,4,6-Tribromophenol	71.2	(10 - 123)



**EAG Workorder** 1206-00216  
**EAG ID:** 1206-00216-003  
**Client ID:** BR-AST 1  
**Client Project:** BR Custom Chrome

**Matrix:** Liquid  
**Analyst:** REC

**Date Sampled:** 06/13/2012  
**Time Sampled:** 1510  
**Date Received:** 06/14/2012

<u>Parameter</u>	<u>CAS #</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>
Volatile Organic TCLP: SW846-8260A					
Benzene	71-43-2	<0.10	0.10	mg/liter	6/20/2012
Carbon tetrachloride	56-23-5	<0.10	0.10	mg/liter	6/20/2012
Chlorobenzene	108-90-7	<0.10	0.10	mg/liter	6/20/2012
Chloroform	67-66-3	<0.10	0.10	mg/liter	6/20/2012
1,2-Dichloroethane	107-06-2	<0.10	0.10	mg/liter	6/20/2012
1,1-Dichloroethene	75-35-4	<0.10	0.10	mg/liter	6/20/2012
Methyl ethyl ketone	78-93-3	<1.0	1.0	mg/liter	6/20/2012
Tetrachloroethene	127-18-4	<0.10	0.10	mg/liter	6/20/2012
Trichloroethylene	79-01-6	<0.10	0.10	mg/liter	6/20/2012
Vinyl chloride	75-01-4	<0.10	0.10	mg/liter	6/20/2012
ZHE TCLP Extraction:SW846-1311		Complete			6/19/2012

<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Recovery Limits</u>
1,2-Dichloroethane-d4	135	(62 - 137)
Toluene-d8	104	(81 - 126)
4-Bromofluorobenzene	127	(80 - 128)



**EAG Workorder** 1206-00216  
**EAG ID:** 1206-00216-004  
**Client ID:** BR-UST 1  
**Client Project:** BR Custom Chrome

**Matrix:** Liquid  
**Analyst:** JAH

**Date Sampled:** 06/13/2012  
**Time Sampled:** 1610  
**Date Received:** 06/14/2012

<u>Parameter</u>	<u>CAS #</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>
Polychlorinated Biphenyls: SW846-8082A					
Aroclor 1016	12674-11-2	<50	50	mg/kg	6/20/2012
Aroclor 1221	11104-28-2	<50	50	mg/kg	6/20/2012
Aroclor 1232	11141-16-5	<50	50	mg/kg	6/20/2012
Aroclor 1242	53469-21-9	<50	50	mg/kg	6/20/2012
Aroclor 1248	12672-29-6	<50	50	mg/kg	6/20/2012
Aroclor 1254	11097-69-1	<100	100	mg/kg	6/20/2012
Aroclor 1260	11096-82-5	<100	100	mg/kg	6/20/2012
Aroclor 1268	11100-14-4	<100	100	mg/kg	6/20/2012
Extraction: SW846-3580		Complete			6/19/2012
<u>Surrogate</u>		<u>Percent Recovery</u>		<u>Recovery Limits</u>	
Tetrachloro-m-xylene		92.1		(59 - 127)	
Decachlorobiphenyl		70.8		(64 - 134)	



**EAG Workorder** 1206-00216  
**EAG ID:** 1206-00216-004  
**Client ID:** BR-UST 1  
**Client Project:** BR Custom Chrome

**Matrix:** Liquid  
**Analyst:** REC

**Date Sampled:** 06/13/2012  
**Time Sampled:** 1610  
**Date Received:** 06/14/2012

<u>Parameter</u>	<u>CAS #</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>
Volatile Organic TCLP: SW846-8260A					
<b>Benzene</b>	71-43-2	<b>0.89</b>	0.78	mg/liter	6/21/2012
Carbon tetrachloride	56-23-5	<0.78	0.78	mg/liter	6/21/2012
Chlorobenzene	108-90-7	<0.78	0.78	mg/liter	6/21/2012
Chloroform	67-66-3	<0.78	0.78	mg/liter	6/21/2012
1,2-Dichloroethane	107-06-2	<0.78	0.78	mg/liter	6/21/2012
1,1-Dichloroethene	75-35-4	<0.78	0.78	mg/liter	6/21/2012
Methyl ethyl ketone	78-93-3	<5.9	5.9	mg/liter	6/21/2012
<b>Tetrachloroethene</b>	127-18-4	<b>4.7</b>	0.78	mg/liter	6/21/2012
<b>Trichloroethylene</b>	79-01-6	<b>0.85</b>	0.78	mg/liter	6/21/2012
Vinyl chloride	75-01-4	<0.78	0.78	mg/liter	6/21/2012
ZHE TCLP Extraction: SW846-1311		Complete			6/19/2012
<u>Surrogate</u>		<u>Percent Recovery</u>		<u>Recovery Limits</u>	
1,2-Dichloroethane-d4		129		(62 - 137)	
Toluene-d8		105		(81 - 126)	
4-Bromofluorobenzene		117		(80 - 128)	





**EAG Workorder** 1206-00216  
**EAG ID:** 1206-00216-005  
**Client ID:** BR-TRANS 1  
**Client Project:** BR Custom Chrome

**Matrix:** Liquid  
**Analyst:** JAH

**Date Sampled:** 06/13/2012  
**Time Sampled:** 1558  
**Date Received:** 06/14/2012

<u>Parameter</u>	<u>CAS #</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>
Polychlorinated Biphenyls: SW846-8082A					
Aroclor 1016	12674-11-2	<1.0	1.0	mg/kg	6/20/2012
Aroclor 1221	11104-28-2	<1.0	1.0	mg/kg	6/20/2012
Aroclor 1232	11141-16-5	<1.0	1.0	mg/kg	6/20/2012
Aroclor 1242	53469-21-9	<1.0	1.0	mg/kg	6/20/2012
Aroclor 1248	12672-29-6	<1.0	1.0	mg/kg	6/20/2012
Aroclor 1254	11097-69-1	<1.0	1.0	mg/kg	6/20/2012
<b>Aroclor 1260</b>	11096-82-5	<b>7.2</b>	1.0	mg/kg	6/20/2012
Aroclor 1268	11100-14-4	<1.0	1.0	mg/kg	6/20/2012
Extraction: SW846-3580		Complete			6/19/2012
<u>Surrogate</u>		<u>Percent Recovery</u>		<u>Recovery Limits</u>	
Tetrachloro-m-xylene		87.1		(59 - 127)	
Decachlorobiphenyl		86.8		(64 - 134)	